

Jhana Enders daily summary

Continued to conduct air monitoring near the Valero Refinery in areas north and south of the intersection of 225 and 610. Additional sampling locations were added to include a number of schools and parks. The data results and locations were provided to the REOC earlier today. Contacted Randy Gee to discuss the Houston Health Department (HHD) concerns he received regarding elevated benzene and toluene levels detected in the neighborhood next to Valero. Randy provided contact information and OSC Enders contacted Loren Raun. Ms. Raun was pleased to hear the EPA was onsite and conducting air monitoring and also provided a status update. HHD is currently conducting air monitoring from a mobile laboratory as well as with additional ground support. Elevated readings were detected on Saturday (09/02/17) from 4000-15,000 ppb and sampling was conducted with summa canisters. The summa canister data will be available tomorrow. Additional summa canister sampling was also taken after the Saturday event. HHD engineers are scheduled to visit Valero tomorrow as Valero would not give them information previously. HHD has a meeting every morning at 0900 hrs with the mobile laboratory and ground crew to discuss air monitoring plans and requested EPA to be present on 09.05.17. They expressed an interest in EPA possibly taking over the air monitoring in the future so they could continue to address the growing number of locations in the Houston area.

Two START teams conducted air monitoring north of 225 and west of 610 in the vicinity of the Valero Refinery. The teams are utilizing a multiRae and a multiRae pro. Air monitoring was conducted for VOCs, CO, H₂S, SO₂, O₂, and LEL with an UltraRae configured for benzene detection. The highest reading detected for VOCs was 0.33 ppm. No benzene was detected by START. TAGA detected benzene below the TCEQ Short term ESL of 53 ppb. The Houston Health Department (HDD) has been utilizing TCEQ Short Term ESL numbers for air monitoring. Further discussions are needed with Jon Rauscher to verify reference numbers for benzene, toluene and other chemicals of concern.

OSC Enders conducted an assessment of the damaged tank at the Valero refinery located at 9701 Manchester Road, Houston, Tx. The #3 tank was damaged during the storm and flooding but the leak has been repaired. EPA air enforcement and TCEQ are having regular calls with Valero regarding the repair and status of the facility. On the date of the incident (08.27.17), Valero notified the NRC (#1188510 at 1156 hrs), the R6 hotline, the General Land Office (GLO), City of Houston (Bureau of Pollution Control & Prevention), Galena Park LEPC, and the CAER Line Messaging center which provides a recorded message of incident. Other calls included; 1) Harris County (left message), 2) Houston LEPC (no answer), Pasadena LEPC (no answer). Valero was also contacted by PHMSA.

Typically, two START teams are available for air monitoring but one team was deployed today to do soil sampling at the new pad site located at Clinton Drive at Dorsett Street. The other START team conducted air monitoring along Valero's facility perimeter for VOCs, CO, H₂S, SO₂, O₂, and LEL with an Ultra Rae configured for benzene detection. The highest VOC reading was 0.6 ppm and no benzene was detected above the instrument's detection limit of 10ppb.

Two Viper systems are now up and running and available for deployment. The Viper system with the Ultra Rae with a lower detection limit (10ppb) will be deployed tomorrow at the Valero fence line near Tank #3 which was damaged in the storm (now repaired). Two additional Viper systems will be sent from Addition for a total of four. Three will have detection limits of 10ppb and one will have a detection limit of 100 ppb.

The TAGA conducted air monitoring throughout the Manchester neighborhood and around the Valero facility with no levels of concern detected. Dave Mickunas will provide more detailed information in a separate email.

TCEQ and the City of Houston were out conducting air monitoring and Flir thermal imaging. No elevated readings had been detected.

A New York Times article on the Manchester area which was initiated by the Houston Health Department with mention of EPA and can be located at;
[HYPERLINK "<https://mobile.nytimes.com/2017/09/06/us/harvey-houston-valero-benzene.html?referer=https://www.google.com/>"]

Two START teams monitored in the vicinity of 225 and 610. Wind directions were largely from the east to the west today. The data was collected using Viper with paper logs used only during adjustments to VIPER. The highest reading recorded was 290 ppb VOCs. No benzene tests were performed due to no VOCs detections above 500 ppb. The highest reading was detected at BMan217 (latitude 29.712925 and Longitude -95.255883) by Team 2. Team 2 monitored in the Manchester area. Team 1 monitored along Lawndale and did not report any detections.

The ERT's mobile TAGA tandem mass spectrometer system experienced a vacuum issue in the afternoon Thursday, 09/07/2017. The lab was returned to the Houston lab to affect repairs. The electrical connection on the bayard-alpert gauge connection was tightened, the nitrogen line was replaced, and the curtain gas pressure was increased. These measures appeared to have rectified the issue. The TAGA laboratory was road tested afterwards and no problems were observed. On Friday, 09/08/2017, the TAGA was calibrated and mobilized to the Manchester Street neighborhood to commence monitoring operations. On the way to the above location, the vacuum system failed again. However, this time the fault could not be corrected. The TAGA mobile laboratory was returned to the Houston laboratory and further attempts were conducted to correct the problem. Additionally, the instrument service contract was contacted for advice. The telephone assistance did not yield a solution. A service technician is scheduled to arrive tomorrow to correct the vacuum fault. Moreover, replacement parts were shipped from RTP, NC and will arrive tomorrow. Further information will be provided on the progress and repair of the TAGA MS/MS system. If there are any questions or comments regarding the status of the TAGA, contact David Mickunas at (609) 865 1574.

OSC Enders and four EPA air inspectors coordinated with TCEQ regarding monitoring in the Manchester area. Two air personnel accompanied TCEQ for a Valero site visit and two air personnel conducted air monitoring with START.

Valero tank #3 continues to have oil on the floating roof, Valero cut an additional hole in the wall trying to pump down oil on top. Valero is trying to degas and has a cc eliminator which helps vapor go down. At this time Valero was not able to give a time for the tank to be emptied and degassed.

Valero tank 228, a gasoline tank will be emptied and degassed by next week. The leak has been identified and needs to be addressed and repairs will be made after the tank is emptied.

START and the air technical support teams collectively monitored Lawndale street, Magellan Transport, LyondellBassell Refinery, Flint Hills Refinery, Goodyear and the Motiva transfer

station located on Light Company Road. Magellan Transport and the Valero barge loading were monitored simultaneously by START and the air technical support teams. An area of interest was identified by one of the air technical support teams at the intersection of Witter & Red Bluff road between Pasadena Refining and Kinder Morgan. This location will be added to the TAGA route for tomorrow. The technical support lead will work with 6EN management to ensure there are no access issues with Pasadena Refining or Kinder Morgan.

OSC Enders attended the 8:30 conference call between EPA, TCEQ and Valero. Tank #3, Tank #228 (pinhole leak) and barge loading continue to be the only potential sources identified at this time. Valero has a contractor (Envent) coming to degas #3 vapor under the roof. Isolated pockets of oil remain and Valero is cutting door sheets to access. The TCEQ/EPA personnel who visited Valero yesterday, reported there were no strong odors coming off the #3 tank and also expressed they were pleased with the spill cleanup. The OSC spoke with the TCEQ Air Section Chief later in the day and he said TCEQ had no plans to do additional air monitoring unless a complaint was received. Valero is conducting daily perimeter and community air monitoring with a MiniRAE and an UltraRae. Valero is to notify EPA/TCEQ of barge loading in case of citizen complaints. The OSC will notify the R6 hotline. The city of Houston was not on the call.

The four EPA 6EN field personnel serving as air technical support to the OSC under ESF-10 provided air monitoring updates throughout the day. To keep from duplication of efforts on daily reports, the Chief, Air Toxics Enforcement will report the daily activities for these personnel under a separate email to the Situation and Environmental Units with a cc to the OSC.

The TAGA has been repaired and will be available for air monitoring tomorrow. The OSC, one START team and the 6EN air technical support teams will coordinate with TAGA tomorrow. One START team will monitor additional locations identified today. The Las Vegas TAGA mobile laboratory is anticipated to arrive latter this date.